



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,508	04/15/2004	Edward Hin Pong Lee	SJO920020018US3	8556

33787 7590 08/27/2004

JOHN J. OSKOREP, ESQ.  
ONE MAGNIFICENT MILE CENTER  
980 N. MICHIGAN AVE.  
SUITE 1400  
CHICAGO, IL 60611

EXAMINER
----------

OMETZ, DAVID LOUIS

ART UNIT	PAPER NUMBER
----------	--------------

2653

DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/825,508	Applicant(s) LEE, EDWARD HIN PONG	
	Examiner David L. Ometz	Art Unit 2653	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-18 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/15/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

Art Unit: 2653

1. The disclosure is objected to because of the following informalities: the continuing data on the top of page 1 should be updated to include the abandoned status of parent case 10/156633.

Appropriate correction is required.

2. Claim 9 is objected to because of the following informalities: in line 3, "P2" should be deleted in order to maintain consistency. Appropriate correction is required.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9, 12, 13, 14, 17, 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujisawa et al (US Pat 5155646). Fujisawa shows a magnetic head for use in a disk drive in figure 10, comprising: a first pole piece 12; a second pole piece which has a front pole tip 33a-1 and a back gap pedestal 33b-1; a gap layer 16 which separates the first pole piece and the second pole piece at an air bearing surface (ABS); a front connecting pedestal 33a-2 at least partially formed over the front pole tip 33a-1; a back gap connecting pedestal 33b-2 at least partially formed over the back gap pedestal 33b-1; an insulator material 31b-2 formed in between the front and the back connecting pedestals (directly above coils 19 in figure 10 of Fujisawa); and a yoke 13 formed over the front and the back gap connecting pedestals for connecting the front pole tip and the back gap pedestal. With regard to the use of electroplated structures, a "product by process" claim is directed to the product per se, no matter how actually made, see **In re Hirao**, 190 USPQ 15 at 17 (footnote 3, CCPA, 5/27/76); **In re Brown**, 173 USPQ 685 (CCPA 5/18/72); **In re Luck**, 177 USPQ 523 (CCPA, 4/26/73); **In re Fessmann**, 180 USPQ 324 (CCPA, 1/10/74); **In re**

Art Unit: 2653

**Thorpe**, 227 USPQ 964 (CAFC, 11/21/85). The patentability of the final product in a "product by process" claim must be determined by the product itself and not the actual process and an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Therefore, the use of electroplating has not been given patentable weight.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujisawa et al in view of Herrera (US Pat 5923506). Fujisawa shows a magnetic head with a yoke 13 as noted above. However, Fujisawa does not show wherein the yoke comprises a highly resistive magnetic material. Herrera discloses a thin film magnetic head that uses CoZrTa as the material for the yokes (poles) which is a highly resistive material (see col. 1, lines 34-45). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the material in the pole of Fujisawa with CoZrTa as taught by Herrera as doing this would enable high frequency writing of data, thereby increasing the data storage capability of the drive as taught by Herrera (see col. 1, lines 34-45).

6. Claims 11, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujisawa et al in view of Hossain et al (US Pat 6296955). Fujisawa shows a magnetic head with a yoke 13 as noted above. However, Fujisawa does not show wherein the yoke comprises a laminated structure of alternating magnetic and dielectric layers. Hossain et al discloses a thin film

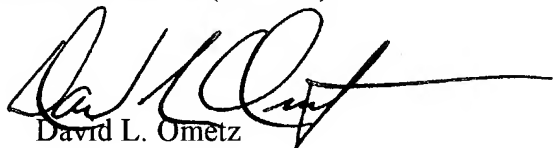
Art Unit: 2653

magnetic head that uses a lamination of dielectric material (alumina) with NiFe for use as the yokes (poles) in a magnetic head (see col. 4, lines 64-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the material in the pole of Fujisawa with a laminated design as taught by Hossain et al as doing this would enable high frequency writing of data by increasing the permeability and resistance of the yoke, thereby increasing the data storage capability of the drive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Ometz whose telephone number is (703) 308-1296. The examiner can normally be reached on M-W, 6:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
David L. Ometz  
Primary Examiner  
Art Unit 2653

DLO  
8/25/04